

Appn. No. : 09/858,012

Grp./A.U. : 3727



Remarks/Arguments

Claim Objections

1. Misnumbered claims 101 -142

The applicant acknowledges the error and appreciates the initiated corrections.

Claims 101-142 are now Claims 76-117.

Election/Restrictions

2. Claims 76-99 currently read on the elected group

3. Claims 100-117 are drawn to a non-elected invention and are withdrawn from further consideration

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Drawings

4. **Disapproved proposed addition of Figs. 55-D and 55-D' because they introduce new matter**

Figs. 55-D and 55-D' show a pack carrier using several units of main frame claimed in the present invention, two of these units each being installed astride a bike wheel.

The proposed amendment does not violate 37 CFR 1.121(f) because this is not new matter. Each main frame or at least one of them is covered under the main claim 119. The original disclosure is in paragraph 1053 in the scope and ramifications section of the application and quoted herein: "Also, the main frame for pack carriers on bike can be mounted by some means to either side of the bike wheels, one for each side if desired." Therefore, if the main claim 119 is allowed, Figs. 55-D and 55-D' should be entered in the patent. The applicant therefore requests the examiner to reconsider and approve the addition of the figures. These figures further support the patentability of the present invention because they

illustrate the applicant's simple main frame idea being used to satisfy a need without the complicated structures and customized pack combinations presented in prior art. The applicant resubmits the proposed drawings.

Claim Rejections – 35 USC 112

5. and 6. Claims 76-99 rejected as failing to define the invention in the manner required by 35 U.S.C.112 (par.2).

Claim 76 is canceled and replaced with new claim 119. Claim 119 is a narrower and more distinct version of canceled claim 76. The main frame that the applicant meant to claim as the invention is one that can secure an ordinary pack on three points specifically proximal the lower half of the left and right edges and proximal the top edge of a face of a pack. The releasable retaining elements are recited for just the lower left and right points because that is already enough to overcome prior art under 35 U.S.C. 112 (par.2). None of the references teach toward the use of such retaining elements. Claim 119 as written is a complete operative device. Some of the arguments to be presented here were already presented in the previous response but the applicant finds it necessary to point them out again just to emphasize the point. **A frame capable of supporting a pack laid against it and equipped with the recited releasable retaining means on the specified locations is a complete workable device.** It can snugly hold an ordinary non-customized pack in place obviating the use of tie downs or bungee cords. It can certainly hold an ordinary backpack snugly in place by its own handle and shoulder straps. The lower portion of a backpack's shoulder straps are slung into or wound around the second and third releasable retaining means. The flexible backpack handle is wound around a fixed knob or attached in another way depending on which first releasable means described in the specifications is adapted. The invention can make any non-customized pack that does not come with the attachment parts in the right places still workable because it can accept a very simple flexible loop type of attachment part that is also easy to install on a pack that doesn't have any.

Claim 119 is the broadest claim the applicant is entitled to because as argued hereafter, it will overcome prior art based on 35 U.S.C. 102(a) and 103(b), thus patentable.

Claims 120-147 are claims dependent on claim 119. They are narrower than claim 119 by the recitation of more specific structure and functions. They further define the scope of the invention as the main frame is further outfitted with more structures to adapt its use on ground, on a bike, and on a scooter. If claim 119 is allowable, these claims should also be allowed because they are narrower and thus more defined over the prior art.

Claim Rejections – 35 USC 102

- 1. Claims 76-99 are rejected under 35 U.S.C. 102(b) as anticipated by Fresco 5,609,278.**

The arguments to be presented shortly are directed mainly toward the patentability of the main claim. **To anticipate an invention, a reference must teach every aspect of the claimed invention either explicitly or implicitly. Claim 119 now overcomes this rejection based on physical differences.**

Physical differences: Fresco does not teach every aspect of the claimed invention. Claim 119 recites specific hardware that is not similar to Fresco's and disposed on three specified locations. Fresco simply teaches the use of "latch and hook material or similar releasable securement means" to secure his storage element to his frame. No particular location points were specified in his disclosure. However, consider the following additional points disclosed namely: a) each storage element has to be guided into and secured onto a rigid C-shaped frame, and b) disclosed preference for a storage element having a frame constructed of plastic or similar supportive material for added structure. To secure a semi-rigid structure(storage element) to another rigid structure(C-shaped frame) it is very unlikely that what Fresco meant by similar releasable securement means is my **hook 122, cleat 316, swing-out cleats 1044 and 1045** or their equivalents disposed somewhere along the lower half of the C-shaped frame. Protrusions from hook 122, cleat 316, or knobs could interfere with the fit. Since velcro(common

name used for latch and hook material) is used to secure his particular storage element onto a C-frame, one velcro attachment may have to be used at the top, the bottom and sides at least for each storage element. There could be one on the upper center point of the frame although it may not be necessary if there are already a couple on the upper support frame 38. Velcro wound around an elongated structure can deter movement only in the direction substantially normal to the structure. The C-frame is such that that velcro could be wound at the side, top and bottom parts of the frame to complete securement of the storage element. If Fresco had the present invention's releasable means (particularly the cleat 316 or swing-out cleats 1044 and 1045) in mind as a similar securement means (although they really are not similar), Fresco could have reduced the number of attachment points and even some horizontal components of this dual C-frame. He most likely would have preferred a simpler frame.

Furthermore, not only does the retaining means hardware differ, the method of attaching also differs. Fresco's disclosure is rather vague or lacking on this but this is probably how it works: **a short length of velcro permanently attached to Fresco's customized storage element is wound around the closest frame component. The securement of the present invention works this way: The lower portion of any backpack's shoulder straps are slung or wound around a hook or cleat disposed on the frame close to the mentioned lower portion.** Based on the above, the present invention's retaining means is definitely not similar to velcro both explicitly and implicitly. It therefore cannot be anticipated. And this does not even take into consideration that the first retaining means on the upper portion of the frame is also definitely not similar to velcro. As gleaned from the disclosure, this first retaining means can range from simple fixed and rotating knobs, cleats, to clamp and ratchet grips.

If one looked more closely, because of the manner velcro works, Fresco's frame can be construed in two ways namely: a) the entire frame is a retaining means, and b) the frame has no retaining means. It cannot therefore be suggesting the retaining means of the present invention. No frame can overcome Fresco on the novelty question based on location and

number of retaining means. The present invention's main claim 119 need not even specify any number or location of the retaining means in order to overcome Fresco in the novelty requirement. **It is novel over Fresco based on the type of retaining means alone regardless of how many there are or of their locations.** Specification regarding number and locations of the retaining means is now limited only by workability of the invention. In this case, the location of the second and third retaining means is broadened to include proximal the lower half left and right edges of the longer side of the frame. The location of the first retaining means is also broadened to include anywhere proximal the upper edge.

In addition to hardware and method of attachment differences mentioned above, the present invention's idea as a whole is also different from and not suggested by any of the references considered, including Fresco. These references teach toward the use of a specific custom-made storage elements to fit their main frames. Fresco mainly teaches towards articulation of several of such storage elements. That a simple modification can significantly alter his invention in the manner the present invention did or what that modification is is not at all suggested in his disclosure. The present invention teaches toward the use of any commercially available non-customized pack like a backpack for attachment to a main frame without or minimal requirement of additional attachment parts. Consider the following:

- 1. Backpacks are not rigid and will not look appropriate on Fresco's C-frame.** Fresco expressed preference for a pack made of plastic or similar supportive material for structure so that it will fit the C-frame nicely.
- 2. A backpack is not symmetrical when cut crosswise.** If installed upright in the backpack position, it will be upside down and look obviously so when carried astride a bike wheel – a very unattractive sight. Also consider spillage from bags that do not have closures. Fresco does not suggest removing the bags to turn them right side up every time one shifts from backpack mode to bike satchel mode. The disclosure states specifically: "Although the upper storage element 42 may be permanently secured to the frame 12, the releasable securement allows for the simple removal, replacement, and repair of the upper storage element 42." Therefore, if Fresco did

not mean the storage element to be releasable for the purpose of being turned upside down, the storage element should be one that is basically symmetrical when cut crosswise. Again, the common backpack does not fill this requirement. The corners and edges of the bottom are more squared than the top. The bottom face is more reinforced than the top face. While the top can be zipped close, outside pockets usually do not have closures.

3. There is no need for shoulder straps onto the C-frame if the storage element(a backpack) already has them.

4. Even if there are already shoulder straps on the storage element and are just not being used, they would interfere with the velcro attachment on the upper fabric support. More structure will have to be added to Fresco's frame to deal with this problem.

5. Backpacks do not have velcro attachments. It would cost about the same to install velcro on a custom-made pack, on a backpack, or any kind of pack for that matter. If there is no cost advantage, the other physical and aesthetic disadvantages that a backpack will impose if used on Fresco's C-frame cannot be justified. And if Fresco had the present invention's retaining means and backpack elements in mind, the use of velcro or its equivalent would not be practical. The C-frame would not be practical either.

Fresco's invention definitely cannot imply or suggest that his frame can be adapted to any ordinary non-customized pack like a backpack and consequently cannot imply or suggest the releasable means of the present invention. Looked differently, it would not be obvious that one would be able to come up with the present invention even after viewing Fresco on hindsight. The references clearly do not suggest the idea of the present invention as a whole. Based on the above arguments, the present invention is not only novel, it is also not obvious over Fresco.

2. Claims 76-99 are rejected under U.S.C. 103(a) as obvious over Fresco

The modification or substitution in the retaining means from velcro to hooks, cleats, knobs, and clamp and ratchet grips is not suggested by Fresco as argued in the previous section. There was no compelling reason to substitute these retaining means

because velcro already satisfies the need. His C-frame was not intended for a backpack. To overcome rejection under U.S.C. 103(a) the modification must be one which would not have been obvious to one of ordinary skill in the art at the time the invention was made. **The substitutions made in the present invention are not obvious. In this case, that person having ordinary skill in the art would probably be one knowledgeable in all the possible hardware for temporarily connecting a pack to a frame - someone familiar with hardware store merchandise either in stock or in a hardware catalog.** Most fasteners used for the purpose of connecting a pack to a frame that one can find in a hardware store include velcro, rings and snap-ring links, bungee cords or tie-downs, hook and eyes, snap buckles, and the like where one component of the fastener is on the frame and the other mate is attached to the pack, except for when velcro is just wound around a frame member. These things are actually the ones we see around us in our day-to-day living as being used for the purpose of temporarily connecting things. These are the ones that should be considered obvious.

Another group of people with probably above ordinary skill in the art would be manufacturers of camping equipment especially one where a pack is attached to a frame. The outdated camping packs use eyes or rings and grommets which are not easily and quickly releasable. The state of the art ones use buckles slipped through slits on the frame and some velcro.

Still another group of people with above ordinary skill in the art would be manufacturers of bike accessories. What do they use to hold their customized panniers to their bike racks? Snap buckles and velcro. How do they hold any other kind of pack to their bike racks? Bungee cords.

Scooter manufacturers? A basket if you could afford one.

Manufacturers of luggage carriers? Tie-downs.

Finally, there are the **inventors in the prior art** considered. Some, including Fresco, used the velcro. Some teach toward the use of tie downs. Another teaches towards the use of grommets and eyes. Some use nuts and bolts and some use more complicated connecting means. All of those who teach toward using their inventions as backpacks provide shoulder straps attached to their frames. None of them even

suggest toward attaching the shoulder straps directly onto their storage elements thus reducing tension imparted on their frames.

The examples above confirm that the releasable means such as those disclosed in the present invention is not obvious even to those with above ordinary skill in the art. The hardware of the present invention associated with winding, slinging, rotating or clamping as a means to releasably secure a pack to a frame is not obvious. In addition, the use of the already existing backpack straps and handle on a relatively cheap, multi-purpose, and commercially available storage element like the common backpack as an attachment means is not obvious. The use of the present invention's main frame produces the following new and unexpected results:

- a) **Common backpacks are now capable of being snugly secured onto a rigid frame resulting surprisingly with a neat-looking unified combination, thus opening a lot of possibilities for their use.** Backpacks can now be carried in style comparable if not better looking than wheelable backpacks or bike panniers and for less cost. Scooters can also carry backpacks in style with the use of this frame.
- b) **A uniplanar frame can accomplish what a C-shaped frame(Fresco's)can do.** And because it is more compact, simpler and less bulky, it opens up more possibilities for mounting on any wheeled vehicle.
- c) **A relatively cheap common backpack is now capable of replacing the function and looks of custom-made storage elements.**
- d) **A backpack's shoulder straps and handle are excellent attachment means for securing to a frame without loss of their original functions.** They can still be used to carry the backpacks even while they are being used to attach the backpack to the frame. This idea was never explored before in prior art. Special attachment hardware including velcro was always provided as part of a storage element. In some cases, it is the special attachment hardware that makes the invention patentable. Backpack straps are given as extra provisions only for the purpose of carrying a storage element on one's back.

Other secondary factors also contribute to establish unobviousness. These are founded on all the possibilities that are now opened with the availability of the main frame. They are:

1) The present invention solves an unrecognized problem.

- a) Children, especially the teens are very conscious about the kind, style, color, size, etc. of the backpacks they use for school. At the same time they have to protect their backs from the heavy load they carry to school. While wheelable backpacks are available, the range of choices of backpacks on them are limited. As a result, unless they find a wheelable backpack that suits their taste, they refuse to wheel their backpacks to school, thus jeopardizing their well-being. When the present invention is mounted on a base equipped with casters, the resulting ground pack carrier can help alleviate this problem. A child can load any backpack of choice onto the pack carrier and wheel the unit to school instead of carrying the backpack on his/her back. On some days where the load is light, he does not have to wheel it nor carry the carrier to school. He can just carry his choice backpack the usual way. When he/she gets home, he can detach the backpack from the carrier and carry the pack to his/her room onto the bed. No dirt is lugged into the house.
- b) Valuable resources are saved. Backpacks and ground pack carriers do not have the same lifetime. Usually the preference for the backpack wanes before it is even worn out. Only the worn out or unwanted backpack is discarded and replaced. The pack carrier is still usable. Alternately, if the carrier breaks first, the backpack can be transferred to another usable carrier. On the other hand, wheelable backpacks are discarded as a whole when either one of the components are worn out or break.

2) The present invention solves a long-felt unsolved need.

Only those with big budgets can afford to carry luggage on bikes in style via panniers. Those who cannot afford panniers have to contend with tie-downs or carry

backpacks on their backs while riding their bikes. Also even those with big budgets prefer backpacks over panniers. When the present invention is mounted on a base that is mounted on a bike, it becomes a pack carrier for bikes. Backpacks can now be carried with style either horizontally or upright on a frame above or astride the wheels in style.

3) Omission of Element

The present invention further saves valuable resources because it has shown that a simple uniplanar frame with simple retaining means can be as effective in securing luggage as one involving more complicated, bulkier framework and retainers. Less resources are needed to manufacture these uniplanar frames. Furthermore, backpacks are cheap and readily available even in small-town general stores. There is no need to waste resources on custom-made luggage.

Reasons why the changes in the claims were not presented before:

The applicant is applying pro se and may not be well versed on expressing ideas in legalese. Also her knowledge about implications associated with legal language may be inadequate. That is why the applicant requested the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. 706.03(d) and 707.07(j). However, since patentable subject matter was probably not yet apparent to the Examiner, the OA sent Jan. 2003 did not provide the applicant with enough constructive material to guide her in directing arguments toward the patentability of the invention. The first set of claims 1-26 were rejected under sections 112, and 102(b) and 103(a) as obvious over Fresco. The following comment followed the rejection under section 112:

“The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only...”

The following comment followed the rejection under section 102(b) and 103(a):

“Due to the indefiniteness of the structure set forth in the claims, a clear representation of the claimed invention cannot be determined. Fresco, however teaches an articulated backpack comprising a frame which is convertible to a wheeled carrier and attachment to a bicycle scooter which appears to meet the structure set forth in the claims.”

The submitted claims 1-26 range from the broadest to the narrowest covering several embodiments of the main frame. Each of them is in one sentence form. All the claims were grouped in a common rejection. If this were proper, it would mean that that rejection is equally applicable to all the claims in the group. It would mean that even the narrowest claims do not contain patentable material in view of Fresco. Some of the dependent claims are obviously novel and not obvious over Fresco even if they can be rejected based on section 112. For example, take the specific case of dependent claim 17 which recites a single column main frame having arms that contain retaining means at its terminals. Even if this claim is not properly written it is definite enough to describe the elements comprising the invention which is both novel and unobvious over Fresco. The dependent claims reciting novel retaining means like cleats, clamps, rotating knobs, etc. that are not suggested in Fresco are novel and unobvious over Fresco as well. It is therefore difficult for the applicant to comprehend the appropriateness of the omnibus rejection. According to MPEP 707.07(j)(par.5) if a claim is otherwise allowable but is dependent on a canceled claim or on a rejected claim, the Office action should state that the claim would be allowable if rewritten in independent form. Although the office action offered no such statement, the applicant still considered the claims to be novel and patentable if properly written. She did her best to accommodate the Examiner's meager general remarks by canceling claims and writing new ones. The arguments presented to support her new claims were directed toward the general differences between a narrow version of the present invention and Fresco with no particular emphasis on the main frame. This is because the rejection under section 102 and 103 based on Fresco sent Jan. 2003 is directed simply toward the fact that Fresco also has a frame that is convertible to a wheeled carrier and attachment of a bicycle/scooter. Because of the general nature of the remark, the applicant argued based on several ways in which the present invention

differed from Fresco. Since retaining means was only one of the many ways, the applicant did not really delve deep enough to get to the heart of the reason for rejection. The arguments were not enough to convince the Examiner. The resulting main claim, now claim 76, is more definite than canceled claim 1. It recites a main frame with three retaining means positioned at different locations within the frame. The "means", however did not include recitation of function which should have been there. Even though the main claim is indefinite as written, it is apparent from the succeeding dependent claims and from the specifications what these "retaining means" consist of. But inspite of these, the Examiner has found no allowable subject matter where there is some. Although the next and final OA came with rejections still under Sections 112 and 102(a) and 103(b), there still appears to be some improvement because this time, the applicant was offered more specific elements regarding Fresco to work on. The latest remark included:

"...Fresco, however teaches an articulated backpack comprising a frame which is convertible to a wheeled carrier and attachable to a bicycle/scooter which has lower left and right points and an upper portion which has a center. The upper center point of the frame is clearly capable of receiving a bag which is configured to have a central attachment means."

The applicant construed this remark as a suggestion for addition of more limitations to the main claim. If the above remarks (or at least a suggestion of a need for more limitations particularly on the main frame) were offered with the first OA, the applicant could have written the claims more distinctly. She could have argued more specifically and convincingly regarding the patentability of the invention by concentrating on the retaining means question in her response to the first OA. The summary rejections could mean that further examination and allowance of the dependent claims rests on the allowance of the main claim. So therefore, the applicant is writing new claims to comply with the implications of the latest remarks and is respectfully requesting the Examiner for reconsideration. No new issues are introduced, thus, require no further search or burden on the part of the Examiner. All previous claims are canceled inorder to simplify the process. There is only one independent claim. The new main claim 119 is narrower than canceled claim 76 by the inclusion of retaining elements from some previous dependent claims. The other

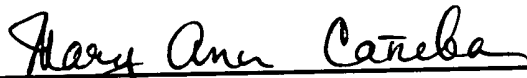
dependent claims 120-147 are practically identical to the canceled dependent claims 77-99 except for changes associated with the numbering of claims, incorporating changes in the main claim into the dependent claims, and combining two or more claims into one claim. Again, the applicant has done her best to overcome rejection based on Section 112 but may still need some assistance. The whereby clauses are either completely eliminated or greatly reduced because this is the portion of the claims that are narrative. The recitation of "means" now include the function. All the "means" recited in the claims are supported in the specifications. Most importantly, the arguments presented are now more convincing and could place the claims in better condition for allowance.

Conclusion and Conditional Request for Constructive Assistance

Therefore, it is submitted that patentable subject matter is clearly present. If the examiner agrees but does not feel that the present claims are technically adequate, the applicant respectfully requests the constructive assistance and suggestions of Examiner pursuant to M.P.E.P. 706.03(d) and 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

Thank you for your consideration.

Very respectfully,



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